

## **ACTIVE FILTER FOR POWER DISTRIBUTION SYSTEM WITH SELECTABLE HARMONIC ELIMINATION**

### ABSTRACT OF THE DISCLOSURE

A power distribution system includes an ac power source; a power bus connected to the ac power source; a capacitor bank shunt-connected to the power bus; and an active filter shunt-connected to the power bus. The active filter includes current sensors, an inverter and an inverter control. Each current sensor senses current flowing through a corresponding capacitor of the capacitor bank. The inverter control, in response to the current sensors, controls the inverter to inject harmonic currents into the power bus.

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